



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 2  
290 BROADWAY

JAN - 6 2017

Mr. Joseph D. Biss, CHMM  
Fibers Site Group  
Project Coordinator  
EHS Support LLC  
201 Edgewood Drive  
Beaver, PA 15009

Re: Fibers Supply Wells Superfund Site, Guayama, Puerto Rico

Dear Mr. Biss:

On April 16, 2015, the United States Environmental Protection Agency ("EPA") authorized as an interim measure the discharge of treated water from the groundwater treatment system at the Fibers Public Supply Wells Superfund Site ("Site") to the Caribbean Sea by way of a drainage ditch. This discharge of the treated water was allowed on a temporary basis after the closure of the Chevron Phillips Chemical Puerto Rico CORE facility ("CORE facility"), which previously received the treated water. EPA's approval for the temporary discharge was given under the express assumption that a permanent, beneficial use of the treated water, as required under the 1991 Record of Decision ("1991 ROD") for the Site, would be pursued in a timely manner. This letter sets forth EPA's preferences for the long-term, beneficial use of the treated groundwater at the Site. Specifically, in this letter, EPA evaluates six alternatives raised by your client, the Fibers Group, in a July 2011 report entitled, "Evaluation of Treated Groundwater Discharge Alternatives" ("the 2011 Groundwater Report"), and specifies three preferred alternatives.

As you are aware, the 1991 ROD calls for the discharge of treated groundwater to the Puerto Rico Electric and Power Authority's ("PREPA's") Patillas Canal, unless a more appropriate option is identified during Remedial Design ("RD"). In a 1993 Groundwater RD Workplan, the potentially responsible parties ("PRPs") identified additional beneficial uses for the treated water, including discharge to an infiltration basin and discharge to the CORE facility. The Patillas Canal was ultimately selected by the PRPs as the preferred beneficial use alternative in a 1995 Groundwater Remediation System Final Design Report ("1995 RD Report"). However, because of the Fibers Group's alleged difficulty reaching an agreement with PREPA, it was eventually determined that the water would instead be sent to the CORE facility, in part because of an evaluation that the treated water would replace an equivalent amount of water that would otherwise be pumped from groundwater wells. This beneficial use of the water continued until the CORE facility began its decommissioning in 2014, which was when the Fibers Group began sending the water via the drainage ditch to the Caribbean Sea.

In 2009, in anticipation of the closing of the CORE facility, EPA called for the PRPs to identify alternate uses for the treated groundwater at the Site. The PRPs submitted to EPA the 2011 Groundwater Report, which identified and evaluated six beneficial use alternatives for the discharge of the treated water from the Site. EPA has discussed these alternatives at length with the Fibers Group and various Puerto Rico agencies. The following is a brief summary of EPA's position with respect to each of the alternatives presented in the 2011 Groundwater Report:

- Alternative 1 – Discharge to the AES Power Plant: EPA does not consider the use of treated water by this power plant to be a beneficial use, in large part because we do not have reason to believe that replacing the facility's current water sourcing practices would result in any reduction in the withdrawal of groundwater. This would likely also be the case for the PRP group's recent proposal to send the treated water to the Puerto Rico Aqueduct and Sewer Authority ("PRASA") for use in their "grey water" system, assuming the primary user is the AES facility.
- Alternative 2 – Discharge to the Guanami River or Melania Creek: The National Oceanic and Atmospheric Administration has raised concerns that this alternative would upset the balance of freshwater and seawater in the receiving waters. Because of this potential environmental impact, EPA does not consider this alternative to be a beneficial use of treated groundwater.
- Alternative 3 – Discharge to the Patillas Canal: This beneficial use alternative was selected by EPA in the 1991 ROD and by the PRPs in the 1995 RD Report. It also received support from the Puerto Rico Department of Natural and Environmental Resources ("DNER") and the Environmental Quality Board ("EQB"). Discharge of treated water to the Patillas Canal would provide water for local irrigation and would recharge the aquifer. Although PREPA has raised concerns as to the quality of the treated water at the Site, analysis of samples collected from the effluent of the Site groundwater treatment system demonstrates that the treated water complies with the 1990 Puerto Rico Water Quality Standards for surface water.
- Alternative 4 – Discharge to the Percolation Basin: Discharge to the percolation basin at the Pfizer facility remains a viable, beneficial use alternative. The percolation basin is located on property operated by Pfizer and owned by the Puerto Rico Industrial Development Company, both PRPs for the Site. The basin is located in close proximity to the Site groundwater treatment system, which results in a reduced cost to convey the water. While adjustments to the basin may be necessary to accommodate the treated water, such adjustments are feasible. This alternative would be designed to return essentially all of the extracted groundwater to the aquifer after treatment and is supported by the DNER.
- Alternative 5 – Discharge into the Caribbean Sea via Drainage Ditch: As stated in the 1991 ROD, it is EPA's and DNER's position that discharge of treated water to the ocean is not a beneficial use.
- Alternative 6 – Discharge to the PRASA Public Water Supply: Supplying the treated water to PRASA for distribution as potable water would be an optimal beneficial use, as the groundwater is already being treated to meet drinking water standards. In 2012, PRASA confirmed its interest in this alternative, a position that was supported by the DNER, EQB, and the Puerto Rico Department of Health. However, PRASA has since reversed its position and, therefore, this alternative is not currently viable.

Of the six alternatives evaluated in depth in the 2011 Groundwater Report, EPA has determined that only Alternative 3, Discharge to the Patillas Canal, and Alternative 4, Discharge to the Percolation Basin, currently qualify as viable, beneficial uses of the treated groundwater at the Site. These two options are therefore EPA's preferred choices for the use of the treated water. Although not included in the report, EPA also recognizes reinjection as a third preferred alternative for the use of the treated groundwater, as it is a practicable beneficial use that would serve to recharge the aquifer.

EPA requests that the Fibers Group submit to EPA a plan detailing the steps to be followed in implementing one of the three preferred alternatives. We encourage the Fibers Group to work further with EPA and relevant Puerto Rico agencies in selecting and developing this plan. Please contact the Remedial Project Manager for the Site, Adalberto Bosque, PhD, at (787) 977-5825 or [Bosque.Adalberto@epa.gov](mailto:Bosque.Adalberto@epa.gov), with any technical questions regarding the preferred beneficial use alternatives. Any legal questions may be directed to Margo Ludmer, Assistant Regional Counsel, at (212) 637-3187 or [Ludmer.Margo@epa.gov](mailto:Ludmer.Margo@epa.gov).

Cordially,

A handwritten signature in blue ink, appearing to read 'Walter Mugdan', with a stylized flourish at the end.

Walter Mugdan, Director  
Emergency and Remedial Response Division

cc: Mr. Daniel E. Vineyard, Common Counsel, Fibers Site Group

